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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,953	10/25/2001	Toshikazu Kobayashi	100809-00051 (SCET 19.104	8865
26304	7590	01/07/2004	EXAMINER PATEL, GAUTAM	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			ART UNIT 2655	PAPER NUMBER

DATE MAILED: 01/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,953

Applicant(s)

KOBAYASHI, TOSHIKAZU

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

***Response to Amendment***

1. This is in response to amendment filed on 12-18-03 ( Paper # 7).
2. Claims 1-6 remain for examination. Claim 7 is canceled.
3. Applicant's arguments regarding objection of claims 2-3 have been fully considered and objection of claims 2-3 has been **withdrawn**.

***Claim Rejections - 35 U.S.C. § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ichimura et al., US. patent 6,097,688 (hereafter Ichimura).

As to claim 1, Ichimura discloses the invention as claimed [see Figs. 1-9, especially 1-4 and 9] including focus drive means, photodetection means, focus-error-signal generation means, recorded-layer movement control means, focus pull-in means and intermediate value, comprising:

focus drive means [fig. 1, unit 6 and 7] for moving the objective lens in a direction orthogonal to the recorded layers of the optical disk [col. 3, line 51 to col. 4, line 12];

photodetection means [fig. 3, unit 74 and 77] for detecting reflected light from said optical disk [col. 6, lines 9-38];

focus-error-signal generation means [fig. 2, unit 33] for generating a focus error signal which corresponds to defocusing of said objective lens relative to any of said

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recorded layers of said optical disk, on the basis of a detection signal of said photodetection means [col. 5, line 37 to col. 6, line 8];

recorded-layer movement control means [fig. 2, unit 40] for generating a signal which controls said focus drive means, on the basis of the error signal, in order to move said objective lens on the recorded layer which is an objective of said objective lens [col. 5, line 37 to col. 6, line 8]; and.

focus pull-in means [fig. 1-2, units 6 & 7, part of unit 31] for pulling in the focus of said objective lens onto said recorded layer on which said objective lens is to be focused, said pull-in means being permitted to switch on and off by said recorded-layer movement control means [col. 5, line 45 to col. 6, line 8 and col. 9, lines 21-63];

wherein said recorded-layer movement control means calculates an intermediate value from a maximum value and a minimum value of said focus error signal corresponding to the certain recorded layer [col. 9, lines 21-63 and col. 10, lines 20-60]; and

in case of moving the focused position of said objective lens to said recorded layer, said focus pull-in means is turned on when said focus error signal has corresponded to the intermediate value [col. 9, lines 21-63 and col. 10, lines 20-60].

NOTE: Ichimura discloses most of the description with respect movement of these lenses with respect to single surface, it is equally applicable to beam movement from layer to layer [col. 10, line 61 to col. 11, line 4].

5. As to claim 2, Ichimura discloses:

An optical disk playback system [fig. 2] comprising the focus control apparatus [fig. 3] [col. 5, line 37 to col 6, line 62], including:

focus drive means [fig. 1, unit 6 and 7] for moving the objective lens in a direction orthogonal to the recorded layers of the optical disk [col. 3, line 51 to col. 4, line 12];

photodetection means [fig. 3, unit 74 and 77] for detecting reflected light from said optical disk [col. 6, lines 9-38];

focus-error-signal generation means [fig. 2, unit 33] for generating a focus error signal which corresponds to defocusing of said objective lens relative to any of said

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recorded layers of said optical disk, on the basis of a detection signal of said photodetection means [col. 5, line 37 to col. 6, line 8];

recorded-layer movement control means [fig. 2, unit 40] for generating a signal which controls said focus drive means, on the basis of the error signal, in order to move said objective lens on the recorded layer which is an objective of said objective lens [col. 5, line 37 to col. 6, line 8]; and.

focus pull-in means [fig. 1-2, units 6 & 7, part of unit 31] for pulling in the focus of said objective lens onto said recorded layer on which said objective lens is to be focused, said pull-in means being permitted to switch on and off by said recorded-layer movement control means [col. 5, line 45 to col. 6, line 8 and col. 9, lines 21-63];

wherein said recorded-layer movement control means calculates an intermediate value from a maximum value and a minimum value of said focus error signal corresponding to the certain recorded layer [col. 9, lines 21-63 and col. 10, lines 20-60]; and

in case of moving the focused position of said objective lens to said recorded layer, said focus pull-in means is turned on when said focus error signal has corresponded to the intermediate value [col. 9, lines 21-63 and col. 10, lines 20-60].

NOTE: Ichimura discloses most of the description with respect movement of these lenses with respect to single surface, it is equally applicable to beam movement from layer to layer [col. 10, line 61 to col. 11, line 4].

6. As to claim 3, Ichimura discloses:

a process in which said recorded-layer movement control means calculates said intermediate value from the maximum value and the minimum value of said focus error signal corresponding to said certain recorded layer is executed in advance of playback of said optical disk [col. 9, line 54 to col. 10, line 60].

NOTE: Calculation are done in advance and stored in memory 94 to be used later.

7. As to claim 4, Ichimura discloses:

means for obtaining an intermediate value [(usually "0")] [this means is inherently present, since Ichimura is calculating this intermediate value] from a maximum value and a minimum value of a focus error signal which corresponds to defocusing of the objective lens, and which is generated by a certain one of the recorded layers [col. 9, line 54 to col. 10, line 60 and fig. 9A to 9C]; and

means for turning on a focus servo [fig. 2, unit 40, especially unit 93] which pulls in a focus of said objective lens, with a bias at which the focus error signal corresponds to the intermediate value, in case of the layer jump to the recorded layer [col. 5, line 45 to col. 6, line 8 and col. 10, line 34 to col. 11, line 4].

8. As to claim 5, it is drawn to a method corresponding to the apparatus of claim 4, is rejected for similar reasons set forth in the rejection of claim 4, supra

***Claim Rejections - 35 U.S.C. § 103***

9. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ichimura as applied to claims 1 and 4 above.

As to claim 6, it is claim corresponding to the apparatus of claim 4, and is rejected for similar reasons set forth in the rejection of claim 4, supra. As to the added limitation of a program product:

"Official Notice" is taken that both the concept and the advantages of providing a program on a disc are well known and expected in the art. It would have been obvious to include store the program on a disc to the system of Ichimura as this stored programs on the disc are known to provide the flexibility to transport the program from one computer to another and also save the program separately so in case of computer crash program does not get destroyed and thereby saving time and money. These concepts are well known in the art and do not constitute a patentably distinct limitation, per se [M.P.E.P. 2144.03].

Ichimura was cited as prior art references in paper no. 6, mailed 9-18-03.

11. Applicant's arguments filed on 12-18-03 ( Paper # 7) have been fully considered but they are not deemed to be persuasive for the following reasons.

12. In the REMARKS, the Applicant argues as follows:

A) That: "The procedure disclosed by Ichimura is quite different from the method disclosed by Applicant's claimed invention. In Applicant's claimed method, an intermediate value calculate from a maximum value and a minimum value of the focus error signal calculated with respect to one layer of optical medium is used to indicate a pull-in position for energizing the focusing servo of an objective lens during a jump from a first recording layer to a second recording layer. .... In addition, before jumping, the focus servo is turned on to set a focus bias for the first recording layer at a position corresponding to an intermediate value ...

As Ichimura fails to teach a method using a focus error signal for optimally controlling a focusing servo during a jump between recording layers on an optical medium." [page 8-9, para. 3 and 1; REMARKS].

FIRST: Ichimura describes his invention with respect to different substrate thickness. However Ichimura clearly discloses, that "this invention can also apply to **multiple-layer optical disks**, each of which as **two or more layers** for recording information, for example." [col. 10, lines 58-60]. So it is very clear that Ichimura invention is applicable to multiple layers.

SECOND: Now lets us look at what Ichimura invention is. Fig. 9A clearly discloses that "focus error signal takes an **intermediate value** between maximum and minimum values .. When the envelope signal meets its peak. In short Ichimura very clearly disclose BOTH limitations of intermediate value AND disk layer jumps.

13. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO **EXPIRE THREE MONTHS** FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

#### ***Contact information***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read "G R Patel", followed by a long horizontal line that ends in a small hook.

Gautam R. Patel  
Patent Examiner  
Group Art Unit 2655

January 6, 2004